doctor who is not cognizant of its value. And yet within the past few months I have been called to treat diphtheria in the families of two doctors, and have learned from a score or more of others that they have neglected to use or had failed to appreciate the value of this magnificent agent which is now at our command for the prevention of diphtheria.

Now, Mr. Doctor, if you are one of the derelicts, get busy at once and immunize your children and the children of your patients.

OSCAR REISS,
Los Angeles.

Neurosurgery

Palliative Neurosurgical Methods—As custodians of the public health physicians have a threefold responsibility, namely, the prevention and the cure of disease and, thirdly, the relief of suffering. Our attention and interests as regards prophylactic and curative measures should not overshadow the problem of those suffering from incurable maladies. Only too frequently when the decision has been made that specific therapeutic measures are not indicated we lose interest in the case although our sympathy for the patient may be great. Nothing is more trying than the care of a patient with an incurable disease who suffers great pain. Frequently these patients live a long time, and any measure that will make their last days more comfortable is a welcome addition to our therapeutic armamentarium.

Pain is the chief cause of discomfort. Morphin and the other narcotics are resorted to in order that the patient may be fairly comfortable. Surely no one can criticize the use of narcotics in such cases, but unfortunately the patient is frequently in a worse physical and mental state because of their use. The narcotic habit should be avoided if possible in any patient who is not entirely incapacitated because of disease, or one whose expectancy of life is longer than six months.

Primary malignant tumors or their metastases are a common cause of severe pain. The following surgical measures have proved efficacious for the relief of pain.

Tumors of the face, sinuses, or neck frequently involve branches of the cervical or cranial nerves. If the pain is confined to the face and head, resection of the sensory root of the gasserian ganglion will give relief. The operation is the one done so successfully for the relief of tic douloureux. Temple Fay has reported several cases of carcinoma of the face and neck in which relief of pain was obtained by a cervical rhizotomy. In some few cases the combined operation of avulsion of the gasserian sensory root and cervical rhizotomy are necessary if the lesion and pain are widespread.

Malignant growths of the pelvic contents and metastatic growths to the vertebral column frequently cause severe and intractable pain. If the patient has a paralysis of both legs, injection of alcohol into or section of the cord above the lesion may be considered. In those cases where the motor disability is absent or slight, section of the anterolateral columns of the cord is recommended. This operation, so-called cordotomy, has been used sufficiently to establish its definite worth. It has also been used in cases of severe pain of the abdomen or lower extremities due to lues and other nonmalignant disease when the pain cannot be controlled by specific therapy. Max Peet in a recent article reviews the history of this operative procedure, and published nineteen cases of his own. The series includes three cases of primary malignancy of the spine, three of tabes dorsalis, two of myelitis, two of carcinoma of the rectum, one of carcinoma of the cecum, one of carcinoma of the uterus, one carcinoma of the breast, one sarcoma of the thigh, and one shell wound of the sciatic nerve in the pelvis. Most of the malignant cases had metastases of the spine or involvement of the pelvic glands with pressure on the lumbosacral plexus. A satisfactory relief of pain was obtained in fourteen cases and partial relief in five.

These operations are not shocking ones, but should be reserved for patients in fairly good condition whose expectancy of life is at least several months.

HOWARD W. FLEMING,
San Francisco.

Urology

Bladder Neck Contracture—Bladder neck contracture or median bar formation at the bladder neck was first elaborated upon by Young in 1911.[1] This is a condition in which there is obstruction to urinary outflow at the bladder neck, due to a fibrous condition of the prostate causing either a ring contracture of the entire bladder neck, or encroachment upon the bladder neck at some point, usually posteriorly. When this occurs posteriorly it is spoken of as a median bar, and is due to a fibrous enlargement of the middle lobe of the prostate causing obstruction by its projection into the internal urethral orifice.

In his excellent work on urology, published late in 1926, Hugh Young [1] discussed this condition in detail. The symptoms of which the patients complain, named in order of their frequency of occurrence are: (1) frequency of urination; (2) pain located in (a) urethra, (b) bladder neck, (c) end of penis, (d) perineum, or (e) suprapubic; (3) difficulty of urination; (4) small stream; (5) weak force; (6) urgency; (7) occasional complete retention; (8) incontinence; (9) sudden stoppage; (10) complete retention; and (11) urination incomplete.

The residual urine found is as a rule less than that found in cases of prostatic hypertrophy, the average being from 25 to 50 cc. There may be no residual urine, or there may be as high as 1000 cc.

By rectal palpation the prostate varies from a small, atrophic condition to an enlargement which could be mistaken for an adenomatous hypertrophy. The diagnosis is made mainly by cystoscopic examination. The cystoscope, after being introduced, is held firmly, as in a vise, at the bladder neck. The thickened bladder neck can be palpated between the

1. Young's Practice in Urology, Vol. 2, Ed. 1926, pp. 481-512.

cystoscope and the examining finger in the rectum.[2] Any encroachment of the fibrous prostate into the bladder neck can be seen through the cystoscope. Obstructions of this type are treated by operation with the use of the Young punch. The bladder neck is punched out either directly through the urethra by means of illumination through the instrument, or else with the aid of a suprapubic opening, which enables the operator to perform the operation with the guidance of the palpating finger in the bladder.

Bladder neck contracture sometimes follows prostatectomy, necessitating a later operation to relieve the condition. This complication can, to a large degree, be eliminated by the use of the punch at the time of the enucleation of the prostate, the bladder neck being punched out posteriorly.[2]

In giving the results of the punch operation, Young reports a cure in 67 per cent of his series, and a marked improvement in an additional 11 per cent.

ROGER W. BARNES,
Los Angeles.

Ophthalmology

Treatment of Strabismus—The treatment of strabismus, or crossed eyes,[3] should begin as soon as the condition is discovered, not only for the purpose of correcting the cosmetic defect, but to save the vision of the crossing eye. If one eye in a child is allowed to remain crossed until that child is over 6 years of age, the chances are that the eye will never have normal vision even though treatment is instituted after that age.

An "amblyopia ex anopsia," or loss of vision through disuse, develops and remains through life. The eye of an infant must be used to develop its maximum visual acuity, and when an eye crosses, it is not used, because if it were the child would see double.

Another reason for correcting the defect early is to try to re-establish binocular vision. Fusion of the two pictures from the eyes in the brain is a faculty which is developed in most of us during infancy, but this faculty cannot be developed when the eyes are crossed.

When the visual acuity of the crossing eye has been improved by refraction and the wearing of the proper glass over that eye, and by making the child exercise the bad eye by covering the good one, the time is ripe for the development of binocular vision. Stereoscopic exercises are used with the amblyoscope and the simple stereoscope. If the eyes do not straighten with the development of stereoscopic vision, we must resort to surgical procedures to keep permanently the ground that we have now gained.

The preferable surgical procedure is to advance or shorten the weaker muscle. If this will not correct the whole defect, the stronger muscle may be receded or partially cut. A free tenotomy is not desirable. Operation is practically always successful if the parents will permit the surgeon to do a second, or even third, operative correction if the first one did not remove the entire defect. Frequently not enough is done at the first operation, as the surgeon fears an overcorrection of the squint, but the adjustment can almost always be made perfect by a subsequent operation.

The writer believes with those who hold that if these patients could be treated while under 3 years of age, we would have a very high percentage of functional as well as cosmetic restoration of these patients who have a strabismus.

WILLIAM A. BOYCE,
Los Angeles.

2. Parker, Wilbur B.: Bladder Neck Obstructions, Their Surgical Relief in Reference to the Young Punch, Surgery, Gyn. and Ob., 1923, pp. 36-43.

3. Weyman, M. F.: California and Western Medicine March, 1926.

Obstetrics and Gynecology

Diet in Pregnancy—Although pregnancy is a normal bodily function and should not be regarded as a malady, it is certainly attended with many risks, and there is such a small border line between its physiology and pathology that the utmost care is necessary. Every pregnant patient should come under prenatal advice.

Diet in pregnancy is a matter of some importance. J. A. Polak[1] considers the following types of toxemia: hyperemesis, the preeclampsia toxemia, and eclampsia. Pernicious vomiting is evidently a serious complication, having a mortality rate of 20 per cent. Diet principles may impress the patient, and are advisable. Etiology or prognosis of the toxemia of the later months of pregnancy is not helped much by blood chemistry or metabolic rate findings. Herrick at Sloane Hospital has every toxemia of the later months of pregnancy studied by internists and biochemists.

In hyperemesis the dehydration and toxicity can be combated with copious ingestion of water in the form of alkaline waters. The carbohydrate deficiency can be cared for through increased intake of carbohydrates, fruit juices, cereals, custards, and some candy. Intravenous glucose alone, or in combination with insulin is occasionally a help. Some of these patients have defective emunctories or unbalance of the endocrine system.

DeLee in Chicago Lying-In Hospital at one time prescribed, without effect, salt-free diet for preeclamptics. Absolute milk diet did not stop the disease. Now he prescribes a salt poor, and a diet low in proteins and fat. Free use of water.

Sansum and Nuzum at Santa Barbara have done some excellent work in nutrition and food requirements. They find that vegetables, some nuts and fruits with the exception of prunes, plums and cranberries, give an alkaline ash causing increased alkalinity of the urine.

In our preclinic work at the College of Medical Evangelists we advise free use of fruits and fresh vegetables, avoiding strongly flavored vegetables, such as onions. We find the h-ion in urine goes up, and blood pressure comes down. The addition

1. American Medical Association Journal, June 24, 1926.